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Public Hospitals and Substance Abuse Services for Pregnant Women and Mothers: Implications for Managed-Care Programs and Medicaid

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ABSTRACT *Although an increasing proportion of the US population receives health services through managed care, pregnant women and mothers eligible for Medicaid who are involved with alcohol or other drugs are often excluded from these programs due in large part to lack of information on costs, service needs, and service use. To develop such information policy, service settings, and managed-care plans, the project conducted a national survey using a provider group with experience in caring for this population, the member universe of the National Association of Public Hospitals and Health Systems. The survey requested detailed information on hospital system information, current managed-care arrangements, outcome measurements, financing, service priorities, and service availability. The 81% response rate (n = 95) identified 35 hospital systems providing services to an average of 998 women in 1997. The majority of these systems (69%) reported coordinating care for these patients, but only 26% reported they computerize patient charts. Most use at least one indicator to measure effectiveness, and 50% use at least four. Counseling/education and transportation were seen as key support services, but many acknowledge they are not reimbursed for critical services such as nutrition education. The discussion highlights the need to provide formal support for core support services, to assist in care coordination and provide incentives for developing more sophisticated information, and to specify related services in the state Medicaid contract language.*

INTRODUCTION

Substance abuse among pregnant women and mothers is a significant public health problem in the United States. Maternal substance abuse is associated with pregnancy complications, low birth weight,[2] an increased risk of infant mortality,[2] neonatal abstinence syndrome,[3] ineffective parenting techniques,[4] child abuse and neglect,[5] and possible human immunodeficiency virus (HIV) transmission.[6] Substance abuse also is often associated with other social and health problems that affect both the mother and infant, including domestic violence, poverty, homelessness, sexual abuse, psychiatric disorders, and poor health care.

While studies have shown that comprehensive health care for pregnant women can reduce the negative effects associated with substance abuse,[7] pregnant and postpartum women are among the most underserved populations in substance abuse

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treatment.[8] Poor urban women are at even further risk for not receiving care; one study revealed that two-thirds of 15 major city hospitals could not refer pregnant women for substance abuse treatment due to a lack of existing services.[9] In addition, women from racial and ethnic minority groups, as well as adolescents, are at substantial risk for undertreatment.[10]

These populations, with their complex needs and circumstances, now face a health care system that is influenced increasingly by managed care. Virtually all states have at least modified their Medicaid programs—the primary sources of support for care to these populations—to fit into the managed-care model. In turn, managed care has affected the way hospitals and clinics provide for and finance care for Medicaid enrollees, thereby creating new incentives and disincentives in how these providers meet client needs.

Substance-abusing pregnant women and mothers are populations who are likely candidates for Medicaid eligibility. However, states generally are moving slowly to incorporate them directly and fully into managed care, preferring instead to use "carve-out" provisions that allow coverage of their treatment under fee-for-service or other arrangements. Carve-out strategies present potential dangers in coordinating the care between substance abuse treatment providers and other providers.[11] While a short-term carve-out strategy may be appropriate, a fully realized managed-care system for the country may make including these populations both necessary and most beneficial. At the same time, much more documentation and experience about the costs, service needs, and provider capacity are needed to inform discussions about Medicaid managed care for substance-abusing pregnant women and mothers.

The objective of this project was to develop information on caring for alcohol- and other drug-dependent (AOD) pregnant women and mothers based on the experiences of public hospital systems that could assist state Medicaid managed-care programs, managed-care organizations, and providers of care to these populations. With financial assistance from the Robert Wood Johnson Foundation's Substance Abuse Policy Research Program, the project team worked in collaboration with the National Association of Public Hospitals and Health Systems (NAPH), an organization representing primarily large urban public and other safety net providers.

Public hospital systems are the core group of traditional providers of care to vulnerable populations that include AOD pregnant women and mothers. These organizations collectively have some of the most concentrated experience in treating these patients. In fact, a 1994 report by the National Public Health and Hospital Institute[12] documents the broad spectrum of services offered to these populations in public hospital systems. Findings from this case study review of 17 programs dedicated to caring for these populations suggest that these sites represent a potentially valuable source of information and experience by which to guide policy and managed-care program development.

The primary sources of information for this project were a national survey and site visits to the NAPH membership, which were conducted during 1998 and early 1999. The survey, site visits, and a review of existing information on Medicaid managed care as it concerns these AOD populations focused on four major research issues:

1. The range of health and health-related services for these populations from the perspective of public hospital systems—clinic, hospital, and community

based—and managed care and related service priorities of hospital administrators and clinicians treating these populations.
2. The financing sources and reimbursement related to this care.
3. Measures of quality and effectiveness.
4. Managed-care reporting requirements and reporting capacity among public hospital systems concerning these AOD populations.

This report compares the survey findings with existing managed-care contracts as they affect the AOD populations and providers using George Washington University Medical Center's extensive, four-volume report, *Negotiating the New Health System: a Nationwide Study of Medicaid Managed Care Contracts*.[13] This 1998 report analyzes the components of full-risk state Medicaid managed-care contracts and request for proposals. In analyzing the survey results with George Washington University's findings, this report presents recommendations to state Medicaid managed-care program directors and managed-care organizations interested in establishing and refining health care services for these populations.

ESTIMATING DRUG USE

According to the National Institute on Drug Abuse, estimating drug prevalence is problematic due to the quality of existing data sets and methodologies used. The array of drugs women use requires a variety of tests that all differ in their ability to detect drug use and abuse. Furthermore, health providers may overestimate or underestimate the risk of drug abuse by their patients, depending on the population they are treating, which can bias clinical decisions to test for drugs.[14] In 1988, the US General Accounting Office found evidence of maternal drug use among 14,000 infants, numbers that are likely to be under-reported by physicians.[15,16] Nonetheless, some estimates have been developed. The National Institute on Drug Abuse conducted a study between 1992 and 1993 of pregnant women in hospitals following delivery. The results indicate that 56% of women reported no alcohol, tobacco, or other drug use during their pregnancies (Fig. 1). Alcohol and tobacco are the most commonly used drugs during pregnancy; 19% report using alcohol products and 20.5% report smoking cigarettes during their pregnancies. Among women who use

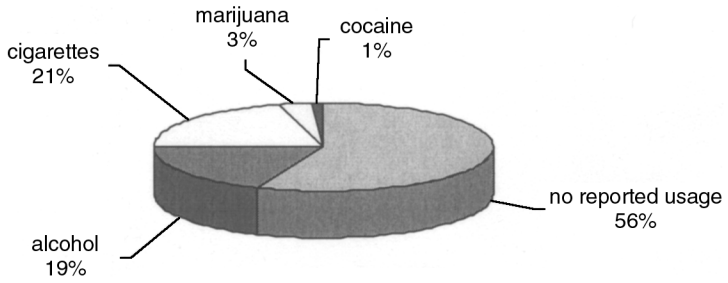

FIGURE 1. Drug use trends among US women who gave birth according to the 1991–1993 National Institute on Drug Abuse National Pregnancy and Health Survey (N = 4 million women). Note that drug usage categories overlap; there is a strong correlation among illicit drug use, cigarette use, and alcohol use. Estimates for drugs other than marijuana and cocaine are not reliable because of small sample sizes.

illegal drugs during their pregnancies, marijuana and cocaine are the most commonly used (3% and 1%, respectively).[17] While African American women used illegal drugs at a higher rate than other women, white women had the highest rates of alcohol and cigarette use. As many as 105,000 pregnant women are in need of substance abuse services annually.

Legislation

In the last 25 years, the federal government has focused increasing attention on the problem of substance abuse among pregnant women and mothers. This concern was born out of the rise in interest in women's health, and a new focus on perinatal acquired immunodeficiency syndrome (AIDS), the crack epidemic,[18] and the dangers of drug use during pregnancy. The 1974 passage of Pub. L. No. 94-371 mandated special consideration for women in drug abuse prevention and treatment programs, and in 1986, Congress began designating funds for services for pregnant women and women with dependent children.[18] In 1988, Congress required states to increase their "set-aside" allocations from 5% to 10% for substance abuse treatment for pregnant women and mothers.[19] Then, in 1990, the Health Care Financing Administration revised its service reimbursement guidelines to include substance abuse treatment for Medicaid-eligible pregnant women.[20]

Barriers to Care

Despite increased federal funding, pregnant women and mothers experience considerable barriers to obtaining substance abuse treatment. The populations require a range of services that are not available to them. They also may face stigma surrounding addiction and motherhood. Staff and other patients receiving care may be predominantly male. Availability of treatment space can act as a barrier.[21] Some treatment centers categorically refuse treatment to pregnant women, and some do not accept Medicaid for pregnant women.[22] Finally, with the increased trend away from treatment toward the criminalization of drug use during pregnancy,[19] pregnant or parenting substance abusers may also be deterred from seeking available treatment out of fear of involving child welfare authorities or the criminal justice system.[7]

Medicaid Managed Care

Low-income mothers and pregnant women depend heavily on government support for their health care, including substance abuse treatment. Substance abuse services for these populations in the past have been provided typically through Medicaid fee-for-service models. The increase of Medicaid managed care, the decline in Medicaid eligibility due to welfare reform, and new options that allow states to refuse cash assistance to drug felons and those who refuse drug screening all have implications for access to care. These trends make it important to examine how these populations are being considered by states through contracts and how public hospital systems—traditional providers of care for these populations—are adapting to managed-care demands. To incorporate the service needs of these women adequately, states will need to understand the scope of the services required by these populations, the current financing of the services, and the public hospital systems' ability to serve this population within the context of managed care.

This assessment will take on added significance as state Medicaid managed-care offices and managed-care programs become increasingly experienced with higher risk populations.[13] In fact, comparisons of contract specificity in only 1 year, between 1995 and 1996, already reveal increasing detail for access coverage and

quality of care. Thus, it may be only a matter of time before many states make a more concerted effort to incorporate AOD pregnant women and mothers directly into managed care. To what extent and how states choose to include these populations in their initiatives is a critical question. Of special concern to providers is the extent that managed-care organizations will cover services deemed necessary.

Substance Abuse Treatment Models for Pregnant Women and Mothers

Substance abuse treatment models traditionally have been developed with the service needs of men in mind.[14,15] Treatment models for men are based on a confrontational method that emphasizes guilt, and they lack the supportive or ancillary services, including child care and family involvement, that pregnant or parenting women often need.[23] In recent years, greater attention has been paid to the service needs of women, and research on treatment models has accumulated. There is a fair amount of agreement that low-income urban women are in need of a comprehensive set of services that extends far beyond detoxification. These women require a family-centered model of care staffed by interdisciplinary clinicians who provide culturally appropriate and nonjudgmental care.[14] Haack's model of community-based care for drug-dependent mothers and their children outlines the complex array of services these populations require—those services that extend beyond medical services.[15] The model outlines services not traditionally found in hospital systems, such as literacy training and vocational training. Yet, hospital systems are the locus of care for many low-income women, and many times are the only source for health care and social services. It is therefore important to assess the availability of these services to women in poor urban areas.

Managed Care and Substance Abuse Treatment: Provider Concerns

How a health care facility perceives "managed care" is important to understand within the context of treating these populations. The Center for Substance Abuse Treatment (CSAT) has analyzed the evolution of the managed-care industry and characterized organizations in four stages of development: (1) organizations that focus on reducing costs by restricting access to services; (2) organizations that manage benefits; (3) organizations that manage the care of enrollees through treatment planning and emphasis on seamlessness of care; and (4) organizations that manage by outcomes of treatment.[24]

CSAT characterizes the fourth stage as the most evolved. Keeping these models in mind is helpful in characterizing the treatment of pregnant women and mothers. Provider concerns regarding these stages of development are evident; in some quarters, managed care has become synonymous with a restriction of access to services, which for pregnant and parenting women, can simply mean no care. For populations that typically are difficult to recruit for treatment, a managed-care model that emphasizes outcomes, rather than restriction of access or benefits, may be especially critical.

Various studies have been conducted on physician attitudes toward managed care in substance abuse treatment services. A 1998 American Society of Addiction Medicine survey[25] indicates that the majority of 200 physicians surveyed considered managed care to have a negative impact on inpatient detoxification and inpatient and outpatient rehabilitation. Other studies show similar concerns with the negative impact of managed care on the ability to make referrals, patient care, and the

added administrative burden.[25,26] Addressing provider concerns may have an impact on the success of managed-care contracts for these populations.

Managed Care and Substance Abuse Treatment: State Requirements

According to George Washington University's study on Medicaid managed-care contracts, great variation exists in whether and to what extent states have detailed their purchasing specifications and their performance standards for managed-care plans. Areas such as service definition demonstrate considerable variation, as do scope of services. George Washington University reports important features of state contracts, including

- most contracts include a requirement to test for substance abuse problems among beneficiaries;
- a majority of contracts require referrals for other services;
- a small but growing number of contracts have incorporated detoxification;
- 19 states address coverage for transportation services for substance abuse beneficiaries, but they tend to be incorporated into carve-out contracts only;
- few states incorporate specific language on needed services for these populations, including acupuncture, methadone maintenance, or community education;
- only three states have explicit antidiscrimination provisions relating to substance abuse, in contrast with mental health (23 states) and sexual preference (16 states).

Traditional challenges remain in key areas that affect AOD pregnant women and mothers, such as difficulty in finding the "fit" of managed care with the health care system generally and key agencies such as those for substance abuse and with developing effective data collection and performance-monitoring capacity. According to the George Washington University study, as of early 1997, certain gaps in access for vulnerable populations remain especially troublesome. For example, self-referrals for substance abuse were permitted in fewer than 50% of Medicaid state contracts. Some states (e.g., Wisconsin, Texas), however, have made some progress in addressing cultural competence, translation, and other critical ancillary service issues for the population of AOD pregnant women and mothers.

In summary, this review identifies key areas of concern regarding the treatment of AOD pregnant women and mothers within the context of managed care. It brings to attention the extensive impediments to the range of services that may compromise access to quality health care. The CSAT continuum suggests the challenges that face managed-care organizations in treating substance-abusing enrollees; they must move beyond benefits and service access management to outcomes management. Finally, the report on the status of state managed-care programs for substance abuse treatment documents some progress, but continuing ambiguity, in service contracts. These concerns form the focus of this project.

PROJECT DESIGN

The Survey Universe

The NAPH membership comprised the survey universe. A 1997 association survey offered a member profile that described a group of large, mostly inner-city institu-

tions serving a predominantly low-income population. The NAPH member characteristics of the 72 responding hospital systems included an average of 419 staffed beds, an average of 17,000 discharges. an average of 109,000 inpatient days, and an average occupancy rate of 71%.

NAPH hospital systems provide a high rate of obstetric/gynecological services. Although known primarily as inpatient facilities, NAPH members have always served as primary care providers for large numbers of indigent and uninsured (self-pay) patients and have provided high volumes of specialty outpatient care. Typically, self-pay patients in safety net hospitals are medically indigent individuals who cannot afford to pay for the services they receive. Of inpatient care in 1997, 67% was for Medicaid and self-pay individuals. Medicare patients and commercially insured patients represented 18% and 16% of total discharges, respectively.[27]

Survey Format

The survey for this project was designed with input from NAPH hospital administrators and the project advisory panel.* The survey was administered from November 1998 to January 1999 to NAPH members (n = 95). The survey posed general questions regarding the hospital systems' provision of substance abuse services to pregnant women and mothers, including questions relating to managed-care penetration, evaluation measures, setting priorities for services, and financing of services.

Surveys were sent to hospital chief executive officers and typically were completed by directors of obstetrics/gynecology or substance abuse programs; planners, coordinators, and administrators for these programs; and general patient information supervisors. Returned surveys were checked for consistency and completeness. When necessary, follow-up calls were made to clarify responses and obtain further information.

The response rate was 81%; of those who responded to the survey, 35 hospital systems (46%) provided alcohol and other drug services to pregnant women and mothers during 1997. The remaining 43 hospital systems who responded to the survey stated that they did not provide these services to pregnant women and mothers in 1997.

Site Visits

The project team conducted two sets of site visits. Visits to Harlem and Bellevue hospitals prior to survey dissemination afforded the opportunity to discuss survey content and procedures for obtaining information from hospital systems. This information supplemented telephone conversations with other hospital system personnel. These visits were conducted during the summer of 1998.

A second set of site visits occurred after the surveys were returned. These visits, to Denver Health and to Woodhull Hospital/Cumberland Health Center in Brooklyn, were used to seek additional information not otherwise available through the

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survey or to provide further details on survey responses. Five content areas formed the focus of these visits, with a concentration on system capacity to provide such information: (1) service spectrum and patient population; (2) service use and costs; (3) financing; (4) data developed for managed-care purposes; and (5) service-monitoring activities. The team requested that meetings include professionals able to speak regarding managed care, budget/financing and utilization, service program, and information system questions. These visits took place during the spring of 1999.

RESULTS

Public Hospital Alcohol and Other Drug Programs

The mean number of total AOD inpatients, including pregnant women and mothers, was 998 (SD = 2,170). The mean number of unduplicated inpatients with a primary diagnosis of AOD dependence was 291, (SD = 335). Of hospital systems, 71% were capable of reporting AOD secondary diagnoses; the mean was 1,608 total patients (SD 1,925), and mean unduplicated patients with a secondary diagnosis of AOD was 1,307 (SD = 1,595). The ability to track outpatient department patients is an important measure of adaptability to managed care; 68.6% of the hospital systems monitor outpatient AOD patients.

Managed Care and Coordinating Care

Ideally, pregnant or parenting women who require substance abuse services interact with many providers, including professionals in substance abuse, obstetrics/gynecology, mental health, social work, and nontraditional providers such as acupuncturists. Women in substance abuse treatment in public hospital systems are also often in need of social services, including housing, domestic violence counseling, day care, and benefits counseling, and they may be interacting with the criminal justice system and child protective service agencies. Because of the variety of encounters a woman may have, coordination of care or case management is clearly very important.

Of NAPH members surveyed, not all are capable of monitoring care for AOD patients. Of hospital respondents, 31% reported that they do not monitor the care of AOD outpatients. Well over the majority of respondents computerize financial records (82.9%); however, only 25.7% reported that they computerize patient charts. Furthermore, 24 hospital systems (69%) report that they coordinate the care of AOD patients. Perhaps indicative of the responsiveness to, if not influence of, managed care, hospital systems with managed-care contracts were more likely to monitor the care of AOD outpatients and to computerize their financial records.

According to the George Washington University report, while state Medicaid programs may recognize the importance of coordinating with traditional agencies in the public sector, contracting language is framed to *recommend* rather than require. Some 19 states have provisions calling for establishing a relationship of their plan with substance abuse services at the state/local level. Missouri, for example, does require plans "to establish a close working relationship" with the state's Division of Substance Abuse and the related carve-out plan, but the phrase leaves considerable leeway for meeting such a mandate. California and other states require the contractor to coordinate drug treatment such as heroin detoxification with appropriate providers.

Iowa has some of the more detailed substance abuse contract information, included within their Iowa Substance Abuse Contract. It addresses court-ordered cases in particular. Massachusetts requires contractors to develop service agreements with state substance abuse agencies and to submit such plans for approval. Coordination of services for substance abuse must be delineated in New York State and Michigan contracts as well.

In site visits to NAPH members, staff serving these women spoke of the importance of coordination among themselves, particularly between obstetrics/gynecology staff and substance abuse staff, as well as substance abuse and mental health staff. Such coordination is challenging in hospital environments that are poorly funded and have low levels of telecommunication. An additional challenge providers discussed in site visits is that a woman may use one hospital to deliver her baby and another for substance abuse services to avoid the stigma surrounding addiction and motherhood or involvement with child protective services. Coordination among hospital staff was characterized as difficult, but coordination between staff at different hospitals systems was considered impossible, particularly if providers are not aware that the woman is receiving treatment elsewhere. Last, coordinating the care of homeless women is considered particularly challenging. Homelessness makes patient contact outside the hospital system burdensome. Eligibility for Medicaid is also difficult for these populations because Medicaid requires a permanent address. Welfare reform, which severed the traditional link between cash assistance and Medicaid, has created further barriers to enrolling in Medicaid and keeping patients enrolled.

Evaluating Care

The effectiveness of substance abuse treatment is always interesting to those funding the programs. Unfortunately, expectations for treatment effectiveness are often too high. Society frequently regards abstinence as the ultimate outcome, which ignores the nature of substance abuse as a chronic condition to be maintained rather than cured.[6]

Public hospital systems seem to recognize this reality in the evaluation measures they choose to monitor their programs. Survey questions inquired about the application of two types of measures: (1) process indicators designed to determine adherence to treatment and the effects during treatment and (2) outcome measures or potential indicators of recidivism.

The majority (80%) of responding hospital systems reported using at least one indicator to evaluate program effectiveness. Four indicators were used by about 50% or more of these systems (Fig. 2). Two of these were process related: program retention rate among AOD patients and missed prenatal appointments. Two others—percentage of low birth weight of births to AOD patients and percentage of AOD patients referred by court mandate—address the effects of care or can be used to determine whether a woman who was in treatment was able to avoid the court system during or after care.

While these measures were most commonly applied, three others were used by at least a third of respondents: (1) missed AOD treatment appointments by mothers, (2) abstinence among pregnant women, and (3) mother-infant dyad intact rate. Missed AOD treatment appointments by mothers and abstinence among pregnant women directly relate to how well the program is able to keep patients in treatment and alter their substance-abusing behavior during that time. Mother-infant dyad

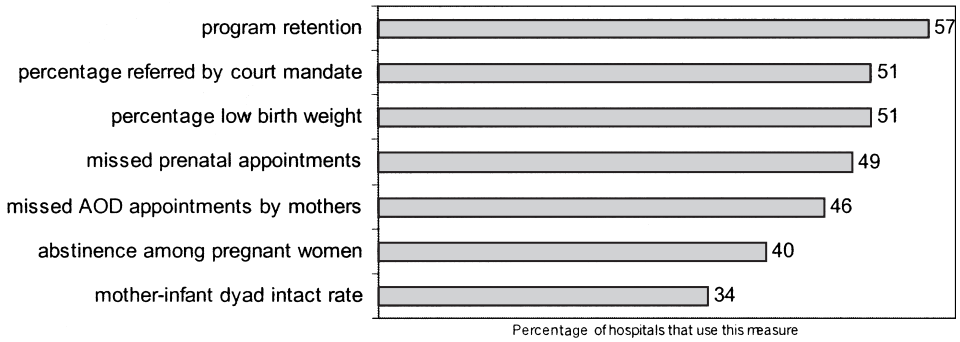

FIGURE 2. Evaluation measures (N = 35).

intact rate considers how well the intervention is working to sustain or re-establish the mother's role as parent.

Findings from the George Washington University report on state Medicaid managed-care programs and contracts affirm state interest in evaluation measures, while providing evidence of wide discretion about which measures should be used. According to this report, while over 50% of the states have incorporated some specific reporting requirements for substance abuse data into their contract language (as compared with general reporting data, which may include substance abuse indicators), very few have more than a few indicators, and virtually none provide definitions to guide the provision of such data. When reporting language was included, it tended to focus on two indicator areas: (1) care process and outcomes and (2) quality assurance or utilization measures. Less-frequent measures included data on domestic abuse, specific identified substance abuse, or discharge data for addictive disorders. Plans are given considerable leeway in this area. Carve-out contracts and general contracts alike tend not to detail reporting requirements for substance abuse services.

One of the site visits affirmed the importance and influence of state Medicaid programs and managed care in determining measures used. Representatives from this hospital system directly stated that the reason they use certain measures are that they are mandated by law. Reports from respondents, however, also reveal untapped potential to measure effect in ways that could demonstrate treatment efficacy and cost savings. Equally important is that such measures may not require major investment in new or expensive tracking technology. For example, one hospital noted that effective care for AOD pregnant women can mean a reduced likelihood that infants will require expensive care in the neonatal intensive care unit. Moreover, a respondent pointed out that one day saved in the neonatal intensive care unit can cover the cost of several group therapy sessions. But, when asked if this provider system uses this relatively easy-to-access indicator in their assessment of services and justification for program support, they stated that no such application had been done. Such an approach is only one example of how treatment reviews could yield important cost and benefit information for states and managed-care programs.

State-Hospital Treatment Guidelines and Managed Care

According to the George Washington University study, a small but growing number of states have added provisions to contract language that address specific concerns

for AOD pregnant and parenting women. In contrast to some services, such as waiting times for emergency care, for which almost all states include specific contract language, only about 25% of states include specific language related to substance abuse services and waiting times. For those states that have included language, the language tends to be restricted to general statements for three categories: emergency care, for which states may require access to 24-hour crisis care; urgent care, by which persons should be seen within 24 hours; and nonurgent care, which may have a prescribed period of 1 or 2 weeks. Massachusetts allows up to six acupuncture treatments for detoxification and four counseling sessions per week. Minnesota specifies "chemical dependency" assessments and that crisis intervention means that individuals "should be seen immediately."

Of NAPH respondents, 69% reported that states stipulate treatment guidelines for treating pregnant women and mothers, and 57% of NAPH respondents reported that their hospital system has formal guidelines for receiving treatment. Respondents that reported the existence of state guidelines for treatment were more likely to report the existence of hospital guidelines pertaining to treatment. It may be that public hospital systems will be more likely to create treatment guidelines only if state contracts require them to do so.

Importance of Supportive Services

NAPH members were asked to rate the relative importance of supportive services for these AOD populations regardless of whether their hospital system provides them. Among 18 supporting services listed, hospital systems rated the following as the most important:

- substance abuse counseling
- family planning
- mental health counseling
- HIV education
- transportation assistance
- nutrition education

With the exception of transportation assistance—a support service that site visits confirmed is seen as core to quality treatment—the most important support activities involved counseling and education (Fig. 3). Respondents also deemed very important, but slightly less so, by respondents were certain other similar activities (e.g., life/parenting skills) and direct service-oriented activities such as transitional assistance or babysitting/child care. Fewer reported four services as the highest priority: respite care, legal assistance, academic training/general equivalency diploma, and vocational assistance.

Respondents also added a number of support services not included in the original survey list:

- peer support group
- breast feeding education and counseling
- domestic violence prevention
- safe housing
- positive educational or recreational activities

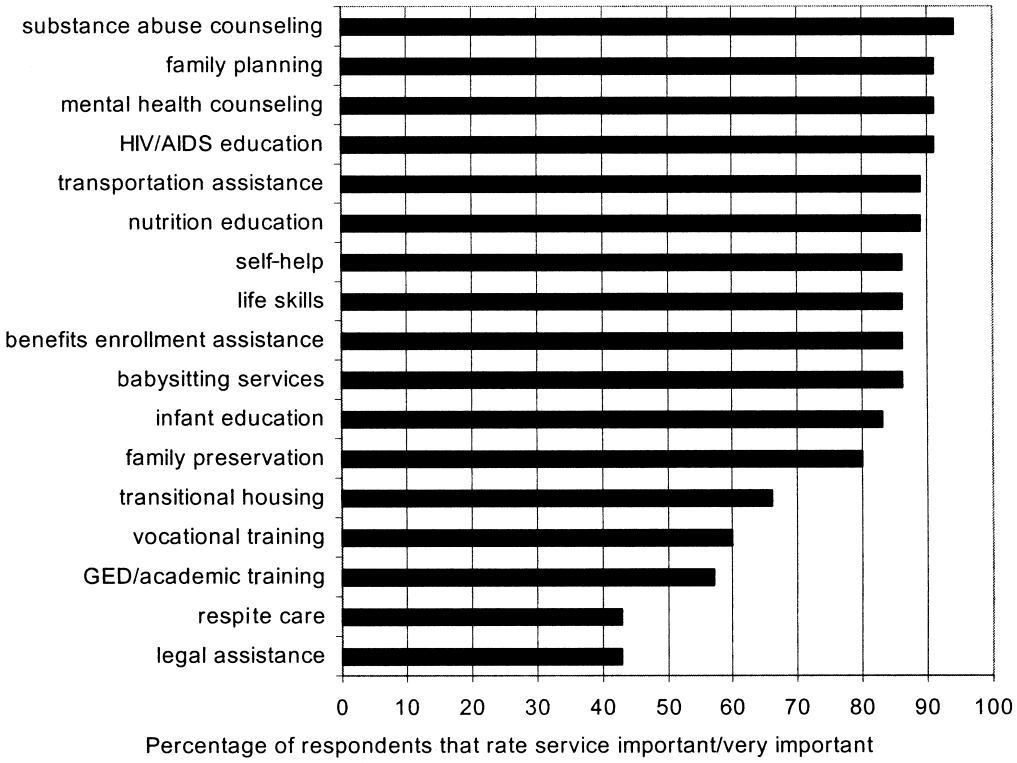

FIGURE 3. How National Association of Public Hospitals and Health Systems members rate the importance of supportive services.

Site visits with hospital administrators also reveal benefits enrollment assistance to be very important (86% rated benefits enrollment assistance as a "very important" service). Hospital administrators were quick to point out that managed-care penetration is irrelevant if these patients are not enrolled in health insurance, and these populations are at high risk for having no insurance. Homelessness, which is not uncommon for these populations, poses a barrier to obtaining health insurance, in part because a valid mailing address is required to enroll in Medicaid. Mental health problems, from which these populations also suffer disproportionately, pose considerable barriers to enrolling in health insurance programs.

This review of support services reinforces the conclusions from professionals in public hospital systems treating AOD pregnant women and mothers of the need for a broad spectrum of assistance, with substantial weight given to education, counseling, and direct service activities such as transportation. More precise reporting to allow for accurate accounting of frequency of use and number of individuals needing these services will require targeted studies and/or information systems capable of detailed accounting of support service and clinical service use across treatment localities.

Services Offered in Public Hospital Systems

While many hospital systems doubtlessly refer their patients outside the system for some or all services, this survey focused on the services provided within the hospital system. For many pregnant substance-abusing women, the public hospital is com-

monly their first and only locus of care. Thus, the immediate availability of medical and supportive services within the hospital system is important to a population that, even if referred to other facilities, may not have the ability to continue their care elsewhere.

Using Haack's model of community-based care for drug-dependent mothers and their children as a guide, the survey asked which services are provided within the system and the reimbursements received for each service. The five most commonly offered services (by more than 90% of respondents), with one exception, represent those direct care-related/assessment activities that are the hallmark of public hospital systems:

- nutrition education
- HIV/AIDS treatment
- tuberculosis treatment
- drug screening
- prenatal care

Perhaps unexpectedly, nutrition education was ranked as the most commonly offered service to AOD pregnant women and mothers. However, in the context of these patients in particular, nutrition is such a critical requirement that it takes its place alongside other traditional public hospital activities.

Mental health and substance abuse counseling and HIV/AIDS education were also identified by the majority (over 80%) of responding hospital systems, suggesting the role of individual or group therapy and the importance of attending to HIV-related conditions in particular. Also included in this group were benefits enrollment assistance, a critical activity for both the hospital system and the patient, whose needs are likely to extend to food and shelter.

The next cluster of respondents—approximately 70%–80%—included transportation, a number of training and counseling activities (e.g., outpatient counseling, family planning, self-help skill development, and life skills training), and pharmacological intervention. With one exception, the 14 remaining services were provided by fewer than half of these systems, including detoxification (a specific service that may be provided by organizations involved directly with such care) and methadone maintenance (for example, in New York, the majority of methadone treatment slots are not in public hospital systems). Least likely to be provided (fewer than 20% of respondents) were transitional housing, legal assistance, and respite care.

Respondents reported that they are able to provide the services they regard as very important; four of the top six most important services are offered by 83% of the hospital systems or more (nutrition education, mental health counseling, HIV/AIDS education, and substance abuse counseling). Two of the top six most important services (family planning and transportation assistance) are offered in 77% and 74% of member respondents, respectively. These are encouraging findings; however, there were some hospital systems that were not faring well. Transportation assistance and family planning were rated very important, but were not offered by six hospital system respondents.

What do these clusters and rankings say about the range and importance of services for AOD pregnant women and mothers and the role of public hospital systems? First, the majority of respondents have available a broad, if not comprehensive, set of educational, therapeutic, and supportive activities on site. The importance of having the capacity to provide such an array was reinforced during site

visits to these programs: When possible, service in one location assists greatly in coordinating care for these AOD populations. While there is a broad array of offered services, there is a "dividing line," with specific care site needs more likely not provided, such as respite care, transitional housing, and residential treatment. These services are likely to require additional resources to develop and maintain that generally fall outside the capacity of these providers. Finally, as noted, the frequency of such core care activities as tuberculosis and HIV/AIDS treatment are an acknowledgement on the part of these providers that the AOD vulnerable populations are likely to suffer from complex conditions that both complicate treatment and require intensive service coordination.

Financing Alcohol and Other Drug Dependency Services in Public Hospital Systems

To profile the sources of support for the aforementioned 27 services, the survey asked public hospital system members to identify reimbursement arrangements. Respondents were asked to consider sources under two primary categories of financing: formal reimbursement, which included fee-for-service, capitation, federal, state, local, and other government reimbursement; and not formally reimbursed financing, which was defined as a source of support not specific to this service, such as local indigent care funds or no source of support. When appropriate, responding systems could check more than one source.

Every NAPH member respondent reported that at least one service provided is funded through informal arrangements or is not reimbursed formally. Services that were funded entirely, or almost entirely, through informal arrangements are babysitting, infant education, legal services, and respite care. Furthermore, hospital systems reported that services they regard as most important are not always formally reimbursed. In 10 hospital systems, transportation assistance is not reimbursed formally; in 12 hospital systems, nutrition education is offered and not reimbursed formally; and in 13 hospital systems, HIV/AIDS education is offered and not reimbursed formally. Site visits reveal cost shifting at work; administrators recognize that some services must be provided regardless of the formal reimbursement structure. The lack of specific funding for services hospital systems feel they must provide to these populations threatens the financial health of these hospital systems. Furthermore, the dependence of public hospital systems on state funding may pose problems if states shift their funding priorities in the future or if federal mandates change.

Study Limitations

Data availability is a challenge in substance abuse treatment, particularly data on mothers who are alcohol or other drug dependent. Data quality is affected by methods of data collection, ability to staff the collection of data by hospital systems, and the likelihood that data are reported accurately. Clinicians do not always diagnose substance abuse, and patients that are abusing substances do not necessarily present for care as such, but are admitted and treated for other conditions. Furthermore, while pregnancy is a diagnostic classification, having dependent children is not. Consequently, accurate data on these populations, particularly data on women with dependent children, are difficult to obtain. Our survey results bore these problems out; the majority of hospital systems reported that they cannot calculate the costs of treating pregnant women or mothers. This presents challenges for hospital systems seeking to negotiate managed-care contracts for these populations. In site visits at hospital systems, staff expressed interest in the ability to track the costs of serving

these populations, but many did not have the staffing or budget to fund such an endeavor. Discussions with site staff suggested that such information could be developed only through "special studies" by which specific requests would be made to tabulate and analyze data.

Caution should also be taken in interpreting the findings regarding the setting of priorities for services for two reasons. First, the responses were the opinion of possibly only one hospital administrator and do not necessarily reflect the policy or sentiment of the hospital system or department. Second, respondents may be more inclined to rate a service based on whether they actually provide the service and not on the true importance or need for the service. A respondent may be tempted to rate a service as "not very important" simply because the hospital cannot or does not provide it. In addition, some respondents found it difficult to set priorities for the services and rated each of the 18 services as very important.

An additional important concern regarding the findings is the small sample size. While the response rate was optimal (81%), only 35 of the 78 hospital systems provided the services of interest. It is therefore important to remember this small number, and a handful of hospital systems can bias results.

STATUS AND FUTURE DIRECTIONS IN THE MANAGED-CARE ENVIRONMENT

The national survey of public hospital systems and review of state Medicaid managed-care contract issues for AOD services to pregnant women and mothers portray the extensive need for health and health-related services. This review has several implications for states, managed-care organizations, and provider systems.

Data and Information System Capacity

- Support and create incentives through managed care for AOD information system capacity development in public hospital systems. Tracking costs and other data does not seem beyond the capacity of these organizations, and it becomes a priority for public hospital systems with their state or managed-care organization requirements. Creating incentives for information development that coincide with managed-care or state Medicaid objectives is likely to create valuable data from public hospital systems for tracking financing and patient care. While data monitoring is critical to understanding the effectiveness of programs, improving information system capacity for AOD services must not add undue administrative burden.
- States specify Medicaid managed-care contract language for reporting AOD services data with guidance from public hospital systems and other major providers of such services. The review of state Medicaid managed-care contracts indicates that states are behind in developing explicit language related to AOD data capacity. Language will vary by state, but without specificity, managed care for AOD pregnant women and mothers either will remain beyond their reach or will be guided by precariously incomplete information. States developing specifications might consider carefully documenting the range of required services and their intensity of use and costs, established perhaps first through data demonstrations in conjunction with providers.
- States and managed-care organizations should work with public hospital systems to develop more sophistication in measuring program effectiveness. Public hospital systems appear to have some capacity to evaluate the effects

of service intervention through process and/or outcome measures. In addition, they may have available to them critical measures (such as neonatal intensive care use among AOD pregnant women) that could be used to assess program effectiveness without placing significant reporting burdens on them. In developing program evaluation measures, states should take care to avoid unreasonable requirements to supply quality evaluation information.

At the same time, public hospital systems may not want to wait for new state initiatives to develop their own effectiveness measures. By working to update and integrate their information systems, they may find existing sources of information available that can work to assess and strongly justify support for cost-effective treatment in these settings.

Support for Comprehensive and Coordinated Services

This report could not define an explicit set of services for the AOD populations of concern given the state of the art in data development and reporting. Nonetheless, responding public hospitals and accompanying site visits identified key issues for further consideration. While the following recommendations may require testing and further review, they represent potential areas of emphasis.

- When possible, encourage settings that coordinate care for AOD mothers and children in few locations. For AOD mothers and pregnant women, multiple sites create additional problems for effective treatment. When it is appropriate, developing incentives for sites that are capable of providing coordinated and more comprehensive care should be explored.
- Provide financial assistance under Medicaid managed-care contracts for transportation services to AOD pregnant women and mothers. For these AOD populations, including their children, transportation is vital to the provision of care; yet, almost 30% of responding hospitals state such assistance is not reimbursed formally. For those organizations, they must patch together support from either internal sources or grant funds, both of which will be subject to annual fluctuations depending on the status or availability of monies.

  One managed-care plan has instituted a 20-mile/20-minute rule regarding access to a provider by an enrollee. Such rules could be linked to transportation assistance, much like California and other states have explored linking the percentage of non-English-speaking populations with provision of interpreters in managed-care networks.
- States and managed-care programs should ensure that support for critical health services for AOD pregnant women and mothers is recognized in Medicaid managed-care contract language. This survey found that key services such as nutrition education are not recognized formally and reimbursed through traditional financing sources. Given the complex conditions of AOD pregnant women and mothers, states and managed-care organizations may want to ensure that education and treatment services for such conditions are covered under Medicaid contracts. A similar case may be made for HIV/AIDS education if no primary source of support for such services is identified. Such support could be included perhaps under broader education financing within managed care.

CONCLUSIONS

This study has documented the current of AOD service activities for AOD pregnant women and mothers in a core set of safety net providers. Its findings affirm that managed care, with its potential to structure service organization and continuity of care, offers significant opportunities in comparison to the traditional unstructured way care has been delivered.

At the same time, it is clear that states and managed-care organizations must come to a greater understanding of the extensive scope of services needed by these populations from the perspective of a longer term, not episodic, model. Finally, as the CSAT model captures, managed care through state Medicaid programs and at the local level will need to decide if their objectives will extend only so far as managing benefits and controlling costs, or whether they will work to ensure seamlessness in the provision of comprehensive care and, ultimately, work to focus on outcomes that work to ensure the best quality care is given to these most vulnerable populations.

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